capacity limitations and the operational issues associated with updating the routing tables. <sup>555</sup> Bell Atlantic states that it may be technically feasible to upgrade the existing toll free database to accommodate 500 and 900 numbers, but this would require extensive system changes. <sup>556</sup> NYNEX supports implementation of service provider portability for 500 numbers as proposed in the INC Report on PCS N00 Portability, which sets forth a four-year implementation schedule. <sup>557</sup> USTA argues that 500 number portability can best be provided through a national, centralized database, similar to the toll free database, and notes that a 900 number portability solution may not be able to utilize the same platform as that contemplated for 500 number portability because of the differing structures of the services associated with 900 number services. <sup>558</sup>

194. Only two parties addressed the issue of 500 or 900 portability in comments filed after passage of the 1996 Act. Interactive Services asserts that the 1996 Act requires LECs to provide service provider portability for 900 numbers when technically feasible, and that the record in this proceeding demonstrates that long-term service provider portability for 900 numbers is technically feasible. Services did not comment on whether service provider portability for 500 numbers is technically feasible. BellSouth states that the 1996 Act is silent with respect to the portability of non-geographic numbers. Services did non-geographic numbers.

## 3. Discussion

195. Section 251(b)(2) of the 1996 Act requires all LECs "to provide, to the extent technically feasible, number portability in accordance with requirements prescribed by the Commission." Section 3, in turn, defines number portability as "the ability of users of telecommunications services to retain, at the same location, existing telephone numbers . . . when switching from one telecommunications carrier to another." 562

<sup>555 &</sup>lt;u>Id.</u> <u>See also</u> NYNEX Comments at 19 (existing switched-based solution that provides 900 service today is not easily transferable to a portable architecture).

<sup>556</sup> Bell Atlantic Comments at 23.

NYNEX Comments at 19. See also Pacific Bell Comments at 23 (implementation of network to support 500 portability will require additional work as detailed in INC Report on PCS N00 Portability).

<sup>558</sup> USTA Comments at 11-12.

<sup>559</sup> Interactive Services Further Comments at 2-4.

BellSouth Further Comments at 3.

<sup>&</sup>lt;sup>561</sup> 47 U.S.C. § 251(b)(2).

<sup>&</sup>lt;sup>562</sup> 47 U.S.C. § 153(30).

- 196. While both LECs and interexchange carriers are able to provide 500 and 900 services, such services are more frequently provided by IXCs. 563 LECs, to date, have offered relatively few 500 and 900 services because the Bell Operating Companies, which serve over 76 percent of the nation's access lines, were precluded from offering interLATA services under the Modification of Final Judgment, 564 and therefore could offer 500 and 900 services only on an intraLATA basis. 565 Conversely, 500 and 900 interLATA services, which account for most of the 500 and 900 numbers, have, up until now, been exclusively provided by IXCs. Thus, most users of 500 and 900 services obtain their numbers from IXCs, and not from LECs.
- Although the statute does not define specifically the numbers that must be portable, the statute on its face imposes an obligation to provide number portability only on LECs.<sup>566</sup> Because the statute's directive to provide number portability applies only to LECs, IXCs are not obligated under the 1996 Act to participate in making their numbers portable when their customers wish to move their numbers to another IXC or any other carrier offering 500 or 900 service. 567 In the case of 900 service, the "user" of the telecommunications service that wants to keep its number when switching carriers is the business that is offering a 900 service, not the end user that is purchasing the information service from the 900 service provider. A 900 service provider typically purchases transport from an IXC and uses a 900 number assigned to that IXC to offer its service. As a consequence, if a 900 service provider wishes to retain its number when switching from one carrier to another, the IXC (and not the LEC that provides exchange access to the IXC) is the party that would have to release the management of the number in question. Likewise, 500 service today is offered exclusively by IXCs, which have blocks of 500 numbers assigned to them for this purpose. When a 500 customer wishes to switch from one carrier to another, the IXC providing the 500 service (and not the LEC

See Long Distance Carrier Code Assignments, Industry Analysis Division, Common Carrier Bureau, Federal Communications Commission (Jan. 1996) at 23, 43 (as of September 30, 1995, the BOCs, in the aggregate, were assigned 37 central office codes for 900 numbers, while interexchange carriers were assigned 321. Similarly, the BOCs were assigned 26 central office codes for 500 numbers, while all other American carriers, in the aggregate, were assigned 372).

See United States v. Western Elec. Co., 552 F. Supp. 131 (D.D.C. 1982), aff'd sub nom. Maryland v. United States, 460 U.S. 1001 (1983); United States v. Western Elec. Co., 569 F. Supp. 1057 (D.D.C. 1983) (Plan of Reorganization), aff'd sub nom. California v. United States, 464 U.S. 1013 (1983); see also United States v. Western Elec. Co., Civil Action No. 82-0192 (D.D.C. Apr. 11, 1996) (vacating the MFJ).

Under the 1996 Act, BOCs now may provide interLATA services that originate outside of their inregion states, and may in the future provide in-region interLATA services upon our finding that they have met the requirements of section 271.

<sup>566 &</sup>lt;u>See</u> 47 U.S.C. § 251(b)(2).

As noted in the <u>500 Access Order</u>, 500 service providers may include IXCs, cellular companies, enhanced service providers, and possibly even LECs. 9 FCC Rcd at 7873.

that provides exchange access to the 500 service provider) would have to relinquish the number in question to the competing carrier. Thus, as a practical matter, portability for the vast majority of 500 and 900 numbers can occur only if the IXC releases to the new carrier management of the assigned 500 or 900 number that is to be ported.

198. We recognize, however, that LECs increasingly may offer 500 and 900 services themselves in the future. To the extent they do, we conclude that those LECs would be obligated under the 1996 Act to offer number portability for their own 500 and 900 numbers to the extent "technically feasible." We believe we have insufficient evidence in this record to determine whether it is technically feasible for LECs to provide portability for their own 500 and 900 numbers. Neither the INC nor state number portability task forces have addressed the issue of 500 and 900 number portability.<sup>568</sup> The record developed on this issue largely predates passage of the 1996 Act, 569 and as a consequence, few parties have focused on this issue. No party to this proceeding has suggested that any of the currently available methods, such as RCF or DID, or any of the long term methods currently under consideration, such as LRN, could be used to provide portability for non-geographic numbers. Instead, the parties that addressed this issue suggest that the current toll free database potentially could be modified to accommodate 500 and 900 numbers, but note that a host of major technical issues would need to be resolved.<sup>570</sup> The only party to this proceeding that argues that the Commission is required under the 1996 Act to mandate service provider portability for 900 numbers. Interactive Services, fails to address the fact that the statutory obligation to offer number portability falls only on LECs, and not on other carriers that offer 900 services. No party has addressed the technical feasibility of modifying the existing toll free database to make only those 500 and 900 numbers that are assigned to LECs portable. We, therefore, direct the INC to examine this issue, and file a report with this Commission within twelve months of the effective date of this order addressing the technical feasibility of requiring LECs to make their assigned 500 and 900 numbers portable, whether it be through modifying the existing toll free database or through another system. Upon receipt of this report, we will take appropriate action under the 1996 Act.

<sup>568</sup> See, e.g., INC Report; CA LNP Task Force Report.

Only two parties that filed comments in response to the Bureau's March 1996 Public Notice addressed the issue of 500 or 900 portability. See BellSouth Further Comments at 3; Interactive Services Further Comments at 2-4.

See, e.g., Ameritech Comments at 15; Bell Atlantic Comments at 23; NYNEX Comments at 19; Pacific Bell Comments at 23-24; USTA Comments at 12.

## IV. FURTHER NOTICE OF PROPOSED RULEMAKING

# A. Long-Term Number Portability - Costs and Cost Recovery

## 1. Background

199. In the Notice, we requested comment on appropriate cost recovery mechanisms regarding long-term number portability.<sup>571</sup> We also sought comment, data, studies, and other information on the costs associated with designing, building, and deploying long-term number portability.<sup>572</sup> Section 251(e)(2) of the 1996 Act requires, inter alia, that the costs of number portability be borne by all telecommunications carriers on a competitively neutral basis.<sup>573</sup>

### 2. Positions of the Parties

- 200. In response to the July Notice, many parties assert that the costs of number portability cannot be estimated until the industry adopts a particular architecture.<sup>574</sup> While the incumbent LECs generally urge the Commission to continue to gather information concerning the potential costs and impacts on existing networks from ongoing state activities, a few parties offer rough estimates regarding the costs of implementing long-term number portability. We note that many of these estimates assume a significant level of location portability.<sup>575</sup>
- 201. The incumbent LECs generally assert that the costs of providing long-term number portability should be borne on a "competitively neutral" basis by those carriers that cause or benefit from number portability.<sup>576</sup> They assert that specific cost recovery mechanisms cannot be established until a better understanding is developed regarding how

<sup>&</sup>lt;sup>571</sup> Notice, 10 FCC Rcd at 12367-68.

<sup>572</sup> Id. at 12368.

<sup>&</sup>lt;sup>573</sup> See 47 U.S.C. § 251(e)(2).

<sup>574</sup> See, e.g., Bell Atlantic Comments at 16; MCI Comments at 19-20; Michigan PSC Staff Reply Comments at 3.

See, e.g., Cincinnati Bell Comments at 9 (citing Ameritech's testimony before Michigan PSC estimating \$50-60 million for the Chicago LATA); GTE Comments at Attachment A (estimating \$1.65 billion to implement method such as LRN nationwide).

<sup>576</sup> See, e.g., Bell Atlantic Comments at 21; Cincinnati Bell Comments at 10; NYNEX Comments at 21-22.

number portability should be provided.<sup>577</sup> Ameritech, however, proposes a cost recovery structure with three categories of costs: (1) administrative and overhead costs for SMS/databases -- to be recovered from all providers; (2) costs directly assignable to number portability deployment -- to be recovered from all LECs, both incumbents and new entrants, in proportion to the amount of telephone numbers that each has transferred to its switches; and (3) costs incurred to increase the capacity of existing infrastructure -- to be borne mostly by incumbent LECs.<sup>578</sup> Some incumbent LECs also contend that the costs of deploying long-term number portability should be allocated between state and federal jurisdictions.<sup>579</sup>

202. Most other parties generally contend that all telecommunications carriers and their customers should bear the costs of long-term number portability because they all benefit from the service and price competition stimulated by portability. Non-LEC parties generally contend that carrier-specific costs incurred in adapting existing systems to long-term number portability should be recovered, like other network upgrades such as AIN and SS7, through tariff and contract mechanisms. Sprint and AT&T advocate implementing portability on a region-by-region basis (with costs amortized over several years) to minimize incumbent carriers' greater burdens for upgrading existing networks. Several parties also contend that the external costs of long-term number portability, i.e., the costs of designing, deploying, and operating facilities common to all carriers, should be shared equitably among all affected carriers. Parties offer several different methods of allocating costs among the relevant carriers.

<sup>&</sup>lt;sup>577</sup> BellSouth Comments at 55-56; BellSouth Reply Comments at 21; Pacific Bell Comments at 14.

Ameritech Reply Comments at 5-7; Ameritech February 21, 1996 Ex Parte Filing at 17.

Ameritech Comments at 6 USTA Comments at 13.

See, e.g., Florida PSC Comments at 7; PCIA Comments at 10; Users Committee Reply Comments at 4.

See, e.g., Competitive Carriers Comments at 21; General Communication Comments at 5-6; GO Communications Reply Comments at 8-9. See also Teleport Reply Comments at 8-9 (arguing that requiring carriers to bear their own internal costs would encourage them to minimize costs).

Sprint Comments at 12-13; AT&T Reply Comments at 23.

Citizens Utilities Comments at 10-11; SBC Communications Comments at 24; PageNet Comments at 13.

See, e.g., Ameritech Reply Comments at 7 (per-query basis); US Airwaves Comments at 7 (charges in proportion to size of carrier's customer base); GO Communications Reply Comments at 8-9 (transaction or perquery basis); MFS Comments at 13 (surcharge assessed per active telephone); NYNEX Comments at 21 (costs allocated based on differing benefits derived from portability); Scherers Communications Comments at 3 (database costs distributed based on usage, like toll free database); Teleport Reply Comments at 9-10 (surcharge per local access line, assessed monthly or annually); USTA Comments at 15 (one-time per-line charge to switch

- 203. After passage of the 1996 Act, and in response to the March Public Notice, several parties addressed the meaning of the statutory language "competitively neutral" as set forth in section 251(e)(2). Ameritech asserts that this standard requires that all costs be allocated to all telecommunications carriers on a basis that is independent of who incurred the cost or who uses portability, and that gives no competitor an advantage. Ameritech criticizes proposals that would limit or exclude recovery of costs incurred by incumbent LECs or allocate costs based on lines. BellSouth urges the Commission to consider the types of infrastructure costs that all classes of carriers will bear in implementing number portability, not just incumbent LECs, in order to avoid imposing large financial burdens on any particular class of carriers, especially those not required to participate in portability. GTE and Pacific Bell argue that requiring each carrier to bear its own costs would result in incumbent LECs paying most of the implementation costs, which is not competitively neutral. Sea
- 204. In contrast, ALTS, Omnipoint, and Cox maintain that competitive neutrality requires each carrier to bear its own costs, and that no carrier should be required to pay for upgrades to another carrier's network. Moreover, Cox argues that incumbent LEC proposals to require that the new entrants bear all number portability costs are not competitively neutral because it would unreasonably burden those carriers. In addition, Cox asserts that, because new entrants will begin providing service at different times, it would be difficult to allocate costs on a competitively neutral basis unless each carrier bears its own costs of implementation. Omnipoint asserts that

carriers plus per-query charge for database access).

<sup>585</sup> Ameritech Further Reply Comments at 7-8. See also Pacific Bell Further Reply Comments at 8.

Ameritech Further Reply Comments at 7 & n.18.

<sup>587</sup> BellSouth Further Reply Comments at 8.

GTE Further Reply Comments at 7; Pacific Bell Further Reply Comments at 8. See also USTA Further Reply Comments at 8-9 & n.5 (also noting that Section 252(d) contemplates that CLECs may pay incumbent LECs for operating, signalling, routing, billing, or other administrative support systems).

<sup>&</sup>lt;sup>589</sup> ALTS Further Comments at 6-7; Cox Further Reply Comments at 5-6; Omnipoint Further Comments at 8.

<sup>&</sup>lt;sup>590</sup> Cox Further Reply Comments at 5, 6.

Cox Further Comments at 5-6 & n.5 (Cox also notes that the new entrant's cost per customer to upgrade to support number portability is likely to be higher than an incumbent's because the software and much of the hardware will cost the same amount regardless of how many customers are being served).

requiring carriers to compensate other carriers with less efficient systems and networks is competitively unfair. 592

- 205. US West advocates permitting LBCs to recover their costs using a per-line surcharge, claiming that all carriers are entitled to recover their implementation costs under the 1996 Act. 593 GTE suggests establishment of a "cost pool," under which each subscriber would be assessed an amount, regardless of which carrier it used. 594 Bell Atlantic claims that allowing incumbent LBCs to recover their costs only from their customers, and not from other providers, is not competitively neutral because costs would be recovered only from those end users who do not use or benefit from portability, and higher incumbent LEC rates would encourage their customers to switch providers. 595 USTA cautions that not permitting carriers to recover their costs through separate charges for number portability will result in an across-the-board increase in local rates, which, for incumbent LECs, must be approved by state regulators. 596
- 206. In contrast, MFS maintains that the competitive neutrality requirement does not apply to end users at all, but rather requires an analysis of charges assessed to other, competing telecommunications carriers.<sup>597</sup> Teleport argues that number portability costs should not be recovered from customers through a number portability surcharge, as such charges would deter customers from transferring their numbers.<sup>598</sup> Cox asserts that GTE's pooling argument is not competitively neutral because it would create incentives for incumbents to inflate costs.<sup>599</sup>
- 207. MFS argues that the competitive neutrality standard in the 1996 Act requires that only the shared/common costs be borne by all telecommunications carriers,

Omnipoint Reply Comments at 8; Omnipoint Further Comments at 8.

US West Further Reply Comments at 7-8. See also Pacific Bell Further Reply Comments at 8-9 (asserting that the Commission need only adopt the basic contours of the cost recovery mechanism by August 8, 1996, to discharge its section 251(e)(2) obligations).

<sup>594</sup> GTE Further Reply Comments at 8.

<sup>595</sup> Bell Atlantic Further Reply Comments at 5.

<sup>596</sup> USTA Further Reply Comments at 9.

<sup>&</sup>lt;sup>597</sup> MFS Further Reply Comments at 6.

Teleport Further Comments at 5.

Cox Further Reply Comments at 6 (also noting that incumbents will be able to reduce costs by taking advantage of unused capacity, while new entrants will have to build their networks from scratch).

and that such allocation should be done based on net revenues.<sup>600</sup> It notes that all telecommunications users should not be interpreted to mean only a segment of the market, a single class of carriers, or a single class of customers.<sup>601</sup> MFS further argues that the shared/common costs could be recovered from each carrier's customer base, but not from other carriers in the form of increased charges.<sup>602</sup> TRA contends that section 251(e)(2) contemplates a competitively fair distribution of the common costs associated with number portability among only those carriers engaged in the provision of local exchange/exchange access services, not a general levy on all telecommunications providers.<sup>603</sup> Teleport and Time Warner Holdings propose similar cost recovery mechanisms to MFS, but argue that the shared costs should be allocated based on the number of lines served, rather than net revenues.<sup>604</sup> ALTS argues that, in order to expedite the implementation of number portability, shared/common costs (e.g., costs associated with the number portability database(s)) should be recovered by a third party from all carriers on a per line basis, but notes that there is considerable economic logic in recovering such costs according to net revenues.<sup>605</sup>

### 3. Discussion

208. We tentatively conclude that three types of costs are involved in providing long-term service provider portability: (1) costs incurred by the industry as a whole, such as those incurred by the third-party administrator to build, operate, and maintain the databases needed to provide number portability; (2) carrier-specific costs directly related to providing number portability (e.g., the costs to purchase the switch software implementing number portability); and (3) carrier-specific costs not directly related to number portability (e.g., the costs of network upgrades necessary to implement a database method). We seek comment on this tentative conclusion and ask whether other types of costs are involved in the provision of long-term service provider number portability.

MFS Further Comments at 4-5. See also Omnipoint Further Comments at 9 (asserting that common costs should be shared by competitors). But see Bell Atlantic Further Reply Comments at 6 (asserting that while revenues should include payments from consumers, they should not exclude any payments that carriers pay out to other carriers).

<sup>601</sup> MFS Further Comments at 5.

<sup>602 &</sup>lt;u>Id.</u> at 7.

<sup>&</sup>lt;sup>603</sup> TRA Further Reply Comments at 7-8.

Teleport Further Comments at 6; Time Warner Holdings Further Comments at 9.

ALTS Further Comments at 7 n.5.

- 209. New section 251(e)(2) of the Communications Act requires that the costs of establishing "number portability be borne by all telecommunications carriers on a competitively neutral basis as determined by the Commission." We tentatively conclude that the "competitively neutral" standard in section 251(e)(2) applies only to number portability costs, and not to cost recovery of carrier-specific, non-number portability-specific costs, such as upgrades to SS7 or AIN technologies. This interpretation is borne out by the plain language of the statute, which only requires that telecommunications carriers bear the costs of number portability. We also tentatively conclude that section 251(e)(2) does not address recovery of those costs from consumers, but only the allocation of such costs among carriers. We seek comment on these tentative conclusions. We also seek comment on the meaning of the statutory language "all telecommunications carriers" as that term is used in section 251(e)(2). We further seek comment on whether the Commission has authority to exclude certain groups of telecommunications carriers from the cost recovery mechanisms for number portability, and, if so, which carriers should be excluded.
- 210. In determining the cost recovery mechanism for currently available number portability measures, we set forth principles with which any competitively neutral cost recovery mechanism should comply. Specifically, we required that (1) a competitively neutral cost recovery mechanism should not give one service provider an appreciable, incremental cost advantage over another service provider, when competing for a specific subscriber; and (2) a competitively neutral cost recovery mechanism should not have a disparate effect on the ability of competing service providers to earn a normal return. 607 As in the case of currently available number portability measures, we believe that these principles equally apply to the allocation of costs incurred due to the implementation of long-term number portability. We, therefore, tentatively conclude that any long-term cost recovery method should comply with these principles. We seek comment on this tentative conclusion.
- 211. In the above Report and Order, we conclude that any state that prefers to develop its own statewide number portability database rather than participate in a regionally deployed database may "opt out" of the national database plan and implement a state-specific database. Pursuant to the requirement of section 251(e)(2) that number portability costs be borne by all telecommunications carriers on a competitively neutral basis as determined by this Commission, we must establish pricing principles that are applied consistently to all carriers. Consequently, we tentatively conclude that the pricing for state-specific databases should be governed by the pricing principles established in this proceeding. We believe the use of our pricing mechanism -- even in states that opt out of the regional database system -- will help to maintain consistency between states, thereby improving the likelihood that competition will develop nationwide.

<sup>606 47</sup> U.S.C. § 251(e)(2).

<sup>607 &</sup>lt;u>See supra</u> ¶ 131-135.

# a. Costs of Facilities Shared by All Carriers for the Provision of Number Portability

- 212. The costs of facilities shared by all telecommunications carriers for providing long-term number portability include, for example, the costs of building and administering regional databases. We seek comment on whether the database administrator(s) selected through the NANC should recover the costs of facilities shared by all telecommunications carriers for the provision of long-term number portability through a charge assessed only on those carriers using the databases or on all carriers whether or not they use the databases. We note that if a regional database consists only of the SMS, usage would consist of uploading and downloading number portability routing information. However, to the extent a database architecture is chosen that utilizes an SMS/SCP pair, usage additionally may include carrier queries to the regional SCP for purposes of providing routing instructions to carriers for individual calls. We seek comment on whether such costs, if recovered from all carriers, should be recovered on a nationwide or regional basis, and how they should be recovered on such bases. To the extent such costs are recovered on a nationwide basis, and multiple entities are selected to administer the regional databases, we seek comment on whether either one of the neutral third-party administrators or a separate entity should be designated to allocate the aggregate costs among each telecommunications carrier and determine the method by which such payments should be made.
- 213. With regard to those carriers responsible for bearing the costs of the shared facilities, we tentatively conclude that the recovery of the costs associated with these databases should be allocated in proportion to each telecommunications carrier's total gross telecommunications revenues minus charges paid to other carriers. We believe that the use of gross telecommunications revenues to allocate costs best comports with our principles for competitively neutral cost recovery set forth above. As we indicated in our discussion of currently available number portability measures, such allocator would not give any provider an appreciable, incremental cost advantage over another service provider, nor have a disparate effect on the ability of competing service providers to earn a normal return. 608 In addition, gross telecommunications revenues are the least distortionary, among practical applications, of allocating costs across telecommunications carriers. 609 We also believe it is appropriate to subtract out charges paid to other carriers, such as access charges, when determining the relevant amount of each carrier's telecommunications revenues for purposes of cost allocation. This is because the revenues attributable to such charges effectively would be counted twice in determining

<sup>608</sup> Id.

The best method of allocating costs across carriers is economic profits. However, economic profits are not the same as accounting profits and as a practical matter are not measured. The second best alternative is gross revenues. David N. Hyman, <u>Public Finance: A Contemporary Application of Theory to Policy</u> 474-476 (2d ed., The Dryden Press 1987).

the relative number portability costs each carrier should pay -- once for the carrier paying such charges and once for the carrier receiving them. As we concluded in the above Report and Order, and as Congress has determined in the 1996 Act, number portability will benefit all telecommunications carriers and users of telecommunications services through increased competition. We believe that a reasonable, equitable, and competitively neutral measure of such benefit is each telecommunications carrier's gross telecommunications revenues minus charges to other telecommunications carriers. We seek comment on whether this proposal for recovery of the costs associated with regional databases comports with the standard set forth in section 251(e)(2), and whether there exist alternative ways of allocating this type of cost among the relevant carriers.

- 214. We currently require the NANPA to recover the costs of administering the NANP, and operating databases to perform such administration, from all telecommunications carriers. The recovery of these costs is allocated among all telecommunications carriers based on the carriers' gross revenues. In our recent Interconnection NPRM, we tentatively concluded that we need not take any further action to comply with section 251(e)(2)'s mandate that the cost of establishing telecommunications numbering administration arrangements be borne by all telecommunications carriers on a competitively neutral basis, in light of the action taken in the Numbering Plan Order. 613
- 215. With the implementation of long-term number portability measures, all carriers, including currently regulated incumbent LECs, will incur costs specific to the deployment and usage of number portability databases. Therefore, we seek comment on whether incumbent LECs should be able to recover their portion of the costs of facilities shared by all carriers in providing long-term number portability from their end users or from other carriers, and whether the Commission should prescribe the particular cost recovery mechanism. To the extent parties argue that such costs should be recovered from other carriers, we seek comment on whether such carriers should include all telecommunications carriers, such as other local exchange providers, CMRS providers, IXCs, and resellers, or only those carriers that have received ported numbers. In addition, assuming that we prescribe a particular recovery mechanism, we ask parties to identify alternative ways carriers may recover this type of cost from carriers (or end users).

<sup>610</sup> Cf. Assessment and Collection of Regulatory Fees for Fiscal Year 1995, Price Cap Treatment of Regulatory Fees Imposed by Section 9 of the Act, Report and Order, 10 FCC Red 13512, 13558-59 (1995) (adopting gross revenues less carrier charges for recovering regulatory fees).

<sup>611 &</sup>lt;u>See supra</u> section III.A.2; Senate Report at 19-20; House Report at 72; <u>see also</u> 47 U.S.C §§ 153(30), 251(b)(2), 251(e)(2).

See Numbering Plan Order, 11 FCC Rcd at 2627.

<sup>613</sup> See Interconnection NPRM at ¶ 252.

- 216. We tentatively conclude the number portability costs of facilities shared by all carriers fall into three subcategories: (a) non-recurring costs, including the development and implementation of the hardware and software for the database; (b) recurring (monthly or annually) costs, such as the maintenance, operation, security, administration, and physical property associated with the database; and (c) costs for uploading, downloading, and querying number portability database information. We seek comment on this tentative conclusion and ask whether there are other types of costs associated with the facilities that will be shared by all carriers.
- 217. We seek comment on whether the first two subcategories, non-recurring and recurring costs, should be recovered through monthly charges to the individual carriers using the database, allocated in proportion to each carrier's gross telecommunications revenues net of payments to other carriers, or from all carriers operating in areas where number portability is offered. We note that non-recurring charges could be recovered in a one-time payment or over time.
- 218. We believe that there are at least two methods for recovering the third subcategory of shared costs, i.e., the costs of uploading, downloading, or querying the database. First, these costs could be recovered through usage charges assessed on those carriers that either access the database to upload number portability routing information, download such information, or directly query the database. Those carriers, including IXCs, could then either recover such costs from their own customer base, or choose not to recover such costs.
- 219. Second, the upload, download, and/or per-query costs could be folded into the monthly charges assessed on the carriers using the databases, which would be allocated in proportion to each carrier's gross telecommunications revenues. We believe this approach is most appropriate in those instances where it is not practical to determine the cost causer of the usage costs, e.g., per-query costs. Under current database approaches, there is no direct correlation between the number of queries made and the number of telephone numbers that have been forwarded because queries will be performed on all calls to a particular switch once any single number has been transferred from that switch. We invite commenting parties to provide credible, substantiated estimates of the amount of the usage costs, including upload, download, and per-query costs, to the extent applicable, and whether such costs will be incurred on a per-minute, per-call, or other basis. We also seek comment on these and alternative methods for recovering per-query costs. Parties are asked to state with specificity the advantages and disadvantages of each.
- 220. In accordance with the 1996 Act, the costs of number portability are to be recovered from all telecommunications carriers on a competitively neutral basis. We seek comment on what steps we need to take to ensure that this requirement is satisfied for all shared industry costs. For instance, we seek comment on whether it is necessary for the Commission to establish a mechanism to ensure that the LNPA(s) recovers its

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costs in a competitively neutral fashion. We also seek comment on what mechanism(s), e.g., federal tariffs, periodic reports, etc., should be utilized to ensure compliance with the statutory requirement and under what authority the Commission can impose such obligations. We note that section 251(e)(1) requires the Commission to create or designate one or more impartial entities to administer telecommunications numbering, and provides the Commission with exclusive jurisdiction over the NANP, and section 251(e)(2) gives the Commission the authority to establish rules by which carriers must bear the costs of telecommunications numbering administration and number portability. We seek comment on the relevance of these provisions to the Commission's authority to impose obligations on the LNPA(s).

# b. Direct Carrier-Specific Costs to Implement Number Portability

- 221. Carrier-specific costs directly related to number portability include, for example, the costs of purchasing the switch software necessary to implement a long-term number portability solution. There are at least two ways of allocating these carrier-specific costs. First, we could require individual carriers to bear their own costs of deploying number portability in their networks. Second, we could require all carriers in a given region to pool their number portability costs, which then would be spread across all carriers providing and using number portability based on some allocator, such as gross telecommunications revenues or number of subscriber lines. We seek comment on whether this proposal comports with the standard set forth in section 251(e)(2), and whether there exist alternative ways of allocating this type of cost among the relevant carriers.
- 222. We seek comment on whether we can and should mandate a mechanism by which incumbent LECs or others then may recover these costs, from either end users or other carriers (such as other local exchange service providers, CMRS providers, IXCs, and resellers), and ask that parties identify the jurisdictional basis for such authority.
- 223. If the Commission were to permit costs to be recovered from consumers, there are at least two options. One option would be to allow carriers the flexibility to recover their number portability-specific costs from their customers in whatever manner the carrier chooses. A second option would be to require carriers to recover their number portability-specific costs through a number portability charge assessed on their end user customers located in areas where number portability is available. We seek comment on the advantages and disadvantages of these proposals and any alternative mechanisms for recovering these costs from consumers. Parties favoring a specific option should comment on whether their preferred approach is consistent with principles of competitive neutrality.

<sup>614 &</sup>lt;u>See</u> 47 U.S.C. § 251(e)(1), (2).

- 224. We note that several additional issues are raised if the carrier-specific, number portability-specific costs are to be passed on to consumers. Therefore, we seek comment on whether, under any cost recovery mechanism, the cost to consumers should: (1) vary among carriers in a given geographic region; (2) remain constant among all carriers in a given geographic region; or (3) vary among different geographic regions, e.g., states or LATAs (while remaining constant within that region, i.e., state or LATA). For each of these approaches, we ask whether the costs to consumers should be permitted to change, for example, on a monthly or annual basis. We also seek comment on whether carriers should charge their customers a single, one-time charge, a monthly fee, or some percentage of the customer's monthly bill, to recover their carrier-specific number portability-specific costs. To the extent this Commission permits carriers to recover their costs through use of a number portability charge, we seek comment on whether such a charge should be specifically identified on consumer bills from those carriers as a separate line item. We seek comment on whether any such charge should be filed as a tariff at either the federal or state level.
- 225. Finally, we seek comment on whether carriers should be permitted to recover carrier-specific, number portability-specific costs from other carriers, through increases in charges for regulated services. Parties that advocate increases in charges for regulated services are asked to specify which charges should be increased and under what jurisdictional authority the Commission can prescribe such increases.

# c. Indirect Carrier-Specific Costs to Implement Number Portability

- 226. We tentatively conclude that carrier-specific costs not directly related to number portability should be borne by individual carriers as network upgrades. As such, carrier-specific costs not directly related to number portability are not subject to the requirements set forth in section 251. We seek comment on this tentative conclusion and on alternative methods for recovering this type of cost.
- 227. Carrier-specific costs that are not directly related to the provision of number portability include, for example, the costs of upgrading SS7 capabilities or adding intelligent network (IN) or advanced intelligent network (AIN) capabilities. These costs are associated with the provision of a wide variety of services unrelated to the provision of number portability, such as CLASS features. Provision of these services will facilitate the ability of incumbent carriers to compete with the offerings of new entrants.
- 228. Incumbent LECs, as well as new entrants, will be required to incur these costs to support the provision of number portability and other services. While some incumbent LECs may have to upgrade existing networks and infrastructure, new entrants will need to design their networks from the outset to include these capabilities. Many incumbent LECs, though, may already have the necessary network capabilities to support the provision of long-term number portability, thus minimizing the need to incur upgrade

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costs. By limiting the deployment of long-term portability to those geographic areas where carriers are already offering, or are likely to offer, competing telephone exchange and exchange access services, we limit these expenditures and their recovery to areas where the incumbent carriers would, solely for competitive reasons, likely upgrade their networks. We note that this approach is also consistent with that taken in implementing 800 number portability, where LECs recovered the core costs of deploying SS7 capabilities as network upgrades from all end users. 615

229. We seek comment on whether we should specify a particular recovery mechanism for carrier-specific costs not directly related to number portability, and on alternative methods of recovering such costs from consumers or other carriers. In addition, we believe that due to the inevitable implementation of switch and other network upgrades to support long-term number portability and other AIN capabilities, networks will operate with greater efficiencies, resulting in increased productivity. We seek comment on whether such future network design modifications should be considered in determining the extent to which carriers may recover carrier specific, non-number portability-specific costs, and if so, how they should be considered.

## d. Price Cap Treatment

230. If this Commission were to specify a particular method of cost recovery from end users, such requirement would include companies that are subject to price cap treatment. Price cap regulation may affect carriers' ability to recover their costs under the methods described above, or other possible methods, because it restricts the flexibility with which price cap carriers may price various services. We tentatively conclude that price cap carriers should be permitted to treat as an exogenous cost any carrier-specific. number portability-specific costs they incur, but that such carriers should not be permitted to treat as an exogenous cost any carrier-specific, non-number portability-specific costs. These conclusions are consistent with our 800 Access proceeding where costs specific to 800 access were accorded exogenous cost treatment, while core SS7 costs were treated as general network upgrades. 616 We, therefore, seek comment specifically on how price cap companies should be permitted to recover costs for facilities shared by all carriers; carrier-specific, number portability-specific costs; and carrier-specific, non-number portability-specific costs. In particular, we seek comment on whether price cap companies should be permitted to treat exogenously any of the above number portabilityspecific cost categories. We also seek comment on whether these costs, alternatively, should be placed in a new price cap basket or an existing basket. If parties recommend that such costs are to be placed in an existing basket, we ask parties to identify which basket would be most appropriate.

See, e.g., Provision of Access for 800 Service, Report and Order, 4 FCC Rcd 2824, 2832 (1989), modified on recon., 6 FCC Rcd 5421, 5429 (1991).

<sup>&</sup>lt;sup>616</sup> See Provision of Access for 800 Service, Second Report and Order, 8 FCC Rcd 907, 911 (1993).

#### B. Procedural Matters

## 1. Ex Parte

231. This is a non-restricted notice and comment rulemaking. Ex parte presentations are permitted, except during the Sunshine period, provided they are disclosed as provided in the Commission's rules.<sup>617</sup>

## 2. Regulatory Flexibility Act

232. As required by section 603 of the Regulatory Flexibility Act, 5 U.S.C. § 601 et seq. (1981), the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) of the expected impact on small entities resulting from the policies and proposals set forth in this Further Notice. The IRFA is contained in Appendix C to this Notice. The Secretary shall cause a copy of this Notice, including the IRFA, to be sent to the Chief Counsel for Advocacy of the Small Business Administration in accordance with section 603(a) of the Regulatory Flexibility Act.

### 3. Notice and Comment Provision

- Pursuant to applicable procedures set forth in sections 1.415 and 1.419 of the Commission's Rules, 47 C.F.R. §§ 1.415 and 1.419, interested parties may file comments on this Further Notice of Proposed Rulemaking (FNPRM) on or before August 16, 1996, and reply comments on or before September 16, 1996. To file formally in this proceeding, parties must file an original and twelve copies of all comments, reply comments, and supporting comments. Parties wanting each Commissioner to receive a personal copy of their comments must file an original plus sixteen copies. Comments and reply comments should be sent to the Office of the Secretary, Federal Communications Commission, 1919 M Street, N.W., Room 222, Washington, D.C. 20554. In addition, parties should file two copies of any such pleadings with the Competitive Pricing Division, Common Carrier Bureau, Room 518, 1919 M Street, N.W., Washington, D.C. 20554. Parties should also file one copy of any documents filed in this docket with the Commission's copy contractor, International Transcription Services, Inc. (ITS, Inc.), 2100 M Street, N.W., Suite 140, Washington, D.C. 20037 (202/857-3800). Comments and reply comments will be available for public inspection during regular business hours in the FCC Reference Center, Room 239, 1919 M Street, N.W., Washington, D.C., 20554.
- 234. In order to facilitate review of comments and reply comments, both by parties and by Commission staff, we require that comments be no longer than forty (40)

<sup>617</sup> See generally 47 C.F.R. §§ 1.1202, 1.1203, 1.1206(a).

pages and reply comments be no longer than twenty five (25) pages. Empirical economic studies, copies of relevant state orders, and proposed rule text will not be counted against these page limits. Specific rule proposals should be filed as an appendix to a party's comments or reply comments. Such appendices may include only proposed text for rules that would implement proposals set forth in the parties' comments and reply comments in this proceeding, and may not include any comments or arguments. Proposed rules should be provided in the format used for rules in the Code of Federal Regulations and should otherwise conform to the Comment Filing Procedures set forth in this order. Comments and reply comments must include a short and concise summary of the substantive arguments raised in the pleading. 618 Comments and reply comments also must clearly identify the specific portion of this Further Notice of Proposed Rulemaking to which a particular comment or set of comments is responsive. Parties will not be permitted to file more than a total of ten (10) pages of ex parte submissions, excluding cover letters, except in response to direct requests from Commission staff. This would not include written ex parte filings made solely to disclose an oral ex parte contact. Ex parte filings in excess of this limit will not be considered as part of the record in this proceeding.

235. Parties also are asked to submit comments and reply comments on diskette. Such diskette submissions would be in addition to and not a substitute for the formal filing requirements addressed above. Parties submitting diskettes should submit them to Wanda M. Harris, Competitive Pricing Division of the Common Carrier Bureau, 1919 M Street, N.W., Room 518, Washington, D.C., 20554. Such a submission should be on a 3.5 inch diskette formatted in an IBM compatible form using MS DOS 5.0 and WordPerfect 5.1 software. The diskette should be submitted in "read only" mode. The diskette should be clearly labelled with the party's name, proceeding, type of pleading (comment or reply comments) and date of submission. The diskette should be accompanied by a cover letter.

#### V. ORDERING CLAUSES

236. Accordingly, IT IS ORDERED that, pursuant to the authority contained in sections 1, 4(i), 4(j), 201-205, 218, 251, and 332 of the Communications Act as amended, 47 U.S.C. §§ 151, 154(i), 154(j), 201-205, 218, 251 and 332, Part 20 of the Commission's rules, 47 C.F.R. § 20, is AMENDED, and Part 52 of the Commission's rules, 47 C.F.R. § 52, is ADDED as set forth in Appendix B hereto.

<sup>618</sup> Comments and reply comments also must comply with section 1.49 and all other applicable sections of the Commission's Rules. See 47 C.F.R. § 1.49. However, we require here that a summary be included with all comments and reply comments, regardless of length. The summary may be paginated separately from the rest of the pleading (e.g., as "i, ii"). See 47 C.F.R. § 1.49.

- 237. IT IS FURTHER ORDERED that the policies, rules, and requirements set forth herein ARE ADOPTED, effective 30 days after publication of this Order in the Federal Register, except for collections of information subject to approval by the Office of Management and Budget (OMB), which are effective 150 days following publication in the Federal Register.
- 238. IT IS FURTHER ORDERED that, pursuant to the authority contained in sections 1, 4(i), 4(j), 201-205, 218, 251, and 332 of the Communications Act as amended, 47 U.S.C. §§ 151, 154(i), 154(j), 201-205, 218, 251, and 332, a FURTHER NOTICE OF PROPOSED RULEMAKING IS HEREBY ADOPTED.
- 239. IT IS FURTHER ORDERED that BellSouth's Motion to Accept Late Filed Comments IS GRANTED.
- 240. IT IS FURTHER ORDERED that authority is delegated to the Chief, Common Carrier Bureau, as set forth <u>supra</u> in ¶¶ 78, 79, 85, 97, and to the Chief, Wireless Telecommunications Bureau, as set forth <u>supra</u> in ¶¶ 166, 167.

FEDERAL COMMUNICATIONS COMMISSION

William F. Caton Acting Secretary

# APPENDIX A - LIST OF PARTIES

Comments: (filed on or before September 12, 1995)

Ad Hoc Coalition of Competitive Carriers (Competitive Carriers)

Arch Communications Group & AirTouch Paging, jointly (Arch/AirTouch Paging)

Association for Local Telecommunications Services (ALTS)

Americas Carriers Telecommunication Association (ACTA)

Ameritech

Association of Public-Safety Communications Officials-International (APCO)

AT&T Corp. (AT&T)

Bell Atlantic Telephone Companies (Bell Atlantic)

Bell Atlantic NYNEX Mobile, Inc. (Bell Atlantic NYNEX Mobile)

California Cable Television Association (CCTA)

Cellular Telecommunications Industry Association (CTIA)

Cincinnati Bell Telephone (Cincinnati Bell)

Citizens Utilities Company (Citizens Utilities)

Competitive Telecommunications Association (CompTel)

The Ericsson Corporation (Ericsson)

Florida Public Service Commission (Florida PSC)

General Communication, Inc. (General Communication)

General Services Administration (GSA)

GO Communications Corporation (GO Communications)

GTE Service Corporation (GTE)

GVNW Inc./Management (GVNW)

Illinois Commerce Commission

Independent Telecommunications Network (ITN)

Interactive Services Association (Interactive Services)

Jones Intercable, Inc. (Jones Intercable)

Kahn, David L. (David Kahn)

LDDS WorldCom

Marion County, Florida (Marion County)

MCI Telecommunications Corporation (MCI)

MFS Communications Company (MFS)

Missouri Public Service Commission (Missouri PSC)

National Association of Regulatory Utility Commissioners (NARUC)

National Cable Television Association (NCTA)

National Exchange Carrier Association (NECA)

National Emergency Number Association (NENA)

National Telephone Cooperative Association (NTCA)

National Wireless Resellers Association (Wireless Resellers)

New York State Department of Public Service (New York DPS)

Nextel Communications (Nextel)

NYNEX Telephone Companies (NYNEX)

Omnipoint Corporation (Omnipoint)

Organization for the Protection and Advancement of

Small Telephone Companies (OPASTCO)

Pacific Bell

Paging Network, Inc. (PageNet)

PCS Primeco, L.P. (PCS Primeco)

Personal Communications Industry Association (PCIA)

Public Utilities Commission of Ohio (Ohio PUC)

Public Utilities Commission of the State of California (California PUC)

Public Utility Commission of Texas (Texas PUC)

SBC Communications, Inc. (SBC Communications)

Scherers Communications Group (Scherers Communications)

Seattle Local Area Number Portability Trial (Seattle LANP Trial)

Sprint Corporation (Sprint)

TDS Telecommunications Corp. (TDS Telecom)

Telecommunications Resellers Association (TRA)

Teleport Communications Group (Teleport)

Telemation International, Inc. (Telemation)

Teleservices Industry Association (Teleservices)

Texas Advisory Commission on

State Emergency Communications (Texas Advisory Commission)

Time Warner Communications Holdings (Time Warner Holdings)

U.S. Airwaves, Inc. (US Airwaves)

US Intelco Networks, Inc. (US Intelco)

**US** West

United States Small Business Administration.

Chief Counsel for Advocacy (Small Business Administration)

United States Telephone Association (USTA)

Yellow Pages Publishers Association (Yellow Pages)

## Late filed Comments:

BellSouth Corporation and BellSouth Telecommunications (BellSouth) (filed Sept. 13, 1995)

**Replies:** (filed on or before October 12, 1995)

**ACTA** 

Competitive Carriers

Ad Hoc Telecommunications Users Committee (Users Committee)

AirTouch Communications & US West NewVector

Group (jointly) (AirTouch/US West NewVector)

Arch/AirTouch Paging

**ALTS** 

Ameritech

AT&T

**Bell Atlantic** 

Bell Atlantic NYNEX Mobile

BellSouth

Cablevision Lightpath, Inc. (Cablevision Lightpath)

**CCTA** 

California PUC

Cincinnati Bell

CTIA

General Communication

**GO Communications** 

**GSA** 

**GTE** 

**Interactive Services** 

ITN

Jones Intercable

David L. Kahn

**MCI** 

**MFS** 

Michigan Public Service Commission Staff (Michigan PSC Staff)

**NARUC** 

**NENA** 

Nextel

Niagara Telephone Co. (Niagara Telephone) (filed Sept. 22, 1995)

Nortel

**NYNEX** 

Ohio PUC

**Omnipoint** 

Pacific Bell

**PageNet** 

**PCIA** 

PCS Primeco

Pennsylvania Public Utility Commission (Pennsylvania PUC)

SBC Communications

**Sprint** 

TRA

Teleport

Texas Advisory Commission

Time Warner Holdings

Time Warner TeleCommunications (Time Warner Telecom)

US Intelco

**USTA** 

# Late Filed Reply Comments:

Maryland Public Service Commission (Maryland PSC) (filed October 13, 1995)

Further Comments: (filed on or before March 29, 1996)

Arch/AirTouch Paging

**ALTS** 

Ameritech

AT&T

Bell Atlantic

Bell Atlantic NYNEX Mobile

**BellSouth** 

**CCTA** 

Cox Enterprises (Cox)

**GTE** 

**Interactive Services** 

MCI

**MFS** 

MobileMedia Communications (MobileMedia)

**NARUC** 

**NCTA** 

**NENA** 

New York DPS

**NYNEX** 

**Omnipoint** 

**OPASTCO** 

Pacific Bell

**PCIA** 

**SBC** Communications

**Sprint** 

TRA

Teleport

Time Warner Holdings

## **USTA**

## **Late Filed Further Comments:**

Georgia Public Service Commission (Georgia PSC) (filed April 1, 1996) Hillborough County, Florida (filed April 1, 1996)

# Further Reply Comments: (filed on or before April 5, 1996)

Arch/AirTouch Paging

Ameritech

**ALTS** 

AT&T

Bell Atlantic

**BellSouth** 

California Department of Consumer Affairs (CA Consumer Affairs)

California PUC

Cincinnati Bell

CTIA

Cox

**GTE** 

MCI

MFS

MobileMedia

**NYNEX** 

Pacific Bell

**SBC** Communications

**Sprint** 

TRA

Texas Advisory Commission

Time Warner Holdings

**US** West

**USTA** 

#### **APPENDIX B - Final Rules**

## AMENDMENTS TO THE CODE OF FEDERAL REGULATIONS

## PART 20 -- COMMERCIAL MOBILE RADIO SERVICES

Part 20 of Title 47 of the Code of Federal Regulations (C.F.R.) is amended as follows:

1. The authority citation for Part 20 continues to read as follows:

AUTHORITY: Secs. 4, 303, and 332, 48 Stat. 1066, 1082, as amended; 47 U.S.C. 154, 303, and 332, unless otherwise noted.

2. Section 20.15 is amended by adding paragraph (e) to read as follows:

## § 20.15 Requirements under Title II of the Communications Act

(e) For obligations of commercial mobile radio service providers to provide local number portability, see 47 CFR § 52.11.

## PART 52 -- NUMBERING

Part 52 of Title 47 of the Code of Federal Regulations (C.F.R.) is added to read as follows:

1. The authority citation for Part 52 is added to read as follows:

AUTHORITY: Section 4, 48 Stat. 1066, as amended; 47 U.S.C. 154, unless otherwise noted. Interpret or apply sec. 153, 154, 201-04, 218, 225-7, 251-2, 271, 48 Stat. 1070, as amended, 1077; 47 U.S.C. 201-04, 218, 225-7, 251-2, 271 unless otherwise noted.

2. The table of contents for Part 52 is added to read as follows:

## Subpart B - Local Number Portability.

Definitions.
Deployment of Long-Term Database Methods for Number
Portability by LECs.
Database Architecture and Administration.
Deployment of Transitional Measures for Number Portability.

§ 52.9 Cost Recovery for Transitional Measures for Number Portability.
§ 52.11 Deployment of Long-Term Database Methods for Number Portability by CMRS Providers.
§§ 52.12 - 52.99 [Reserved]

3. Part 52 is added to read as follows:

## Subpart B - Local Number Portability.

### § 52.1 **Definitions**.

As used in this subpart:

- (a) The term broadband PCS has the same meaning as that term is defined in section 24.5 of this chapter, 47 CFR § 24.5.
- (b) The term cellular service has the same meaning as that term is defined in section 22.99 of this chapter, 47 CFR § 22.9.
- (c) The term database method means a number portability method that utilizes one or more external databases for providing called party routing information.
- (d) The term *downstream database* means a database owned and operated by an individual carrier for the purpose of providing number portability in conjunction with other functions and services.
- (e) The term incumbent local exchange carrier means, with respect to an area, the local exchange carrier that -- (1) on February 8, 1996, provided telephone exchange service in such area; and (2) (i) on February 8, 1996, was deemed to be a member of the exchange carrier association pursuant to section 69.601(b) of the Commission's regulations (47 CFR 69.901(b)); or (ii) is a person or entity that, on or after February 8, 1996, became a successor or assign of a member described in clause (i).
- (f) The term *local exchange carrier* means any person that is engaged in the provision of telephone exchange service or exchange access. For purposes of this subpart, such term does not include a person insofar as such person is engaged in the provision of a commercial mobile service under 47 U.S.C. § 332(c).
- (g) The term *local number portability administrator (LNPA)* means an independent, non-governmental entity, not aligned with any particular telecommunications industry segment, whose duties are determined by the NANC.